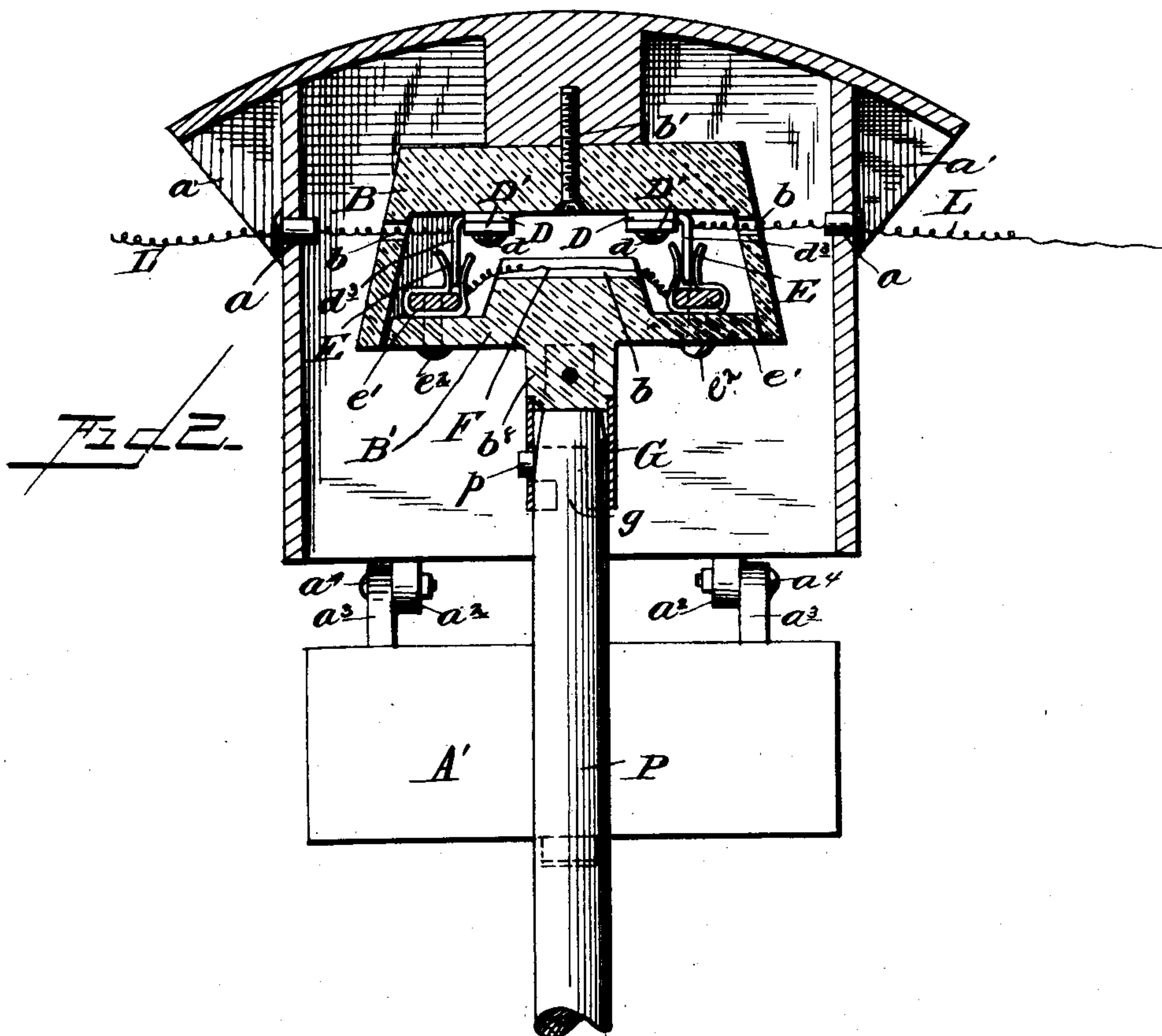
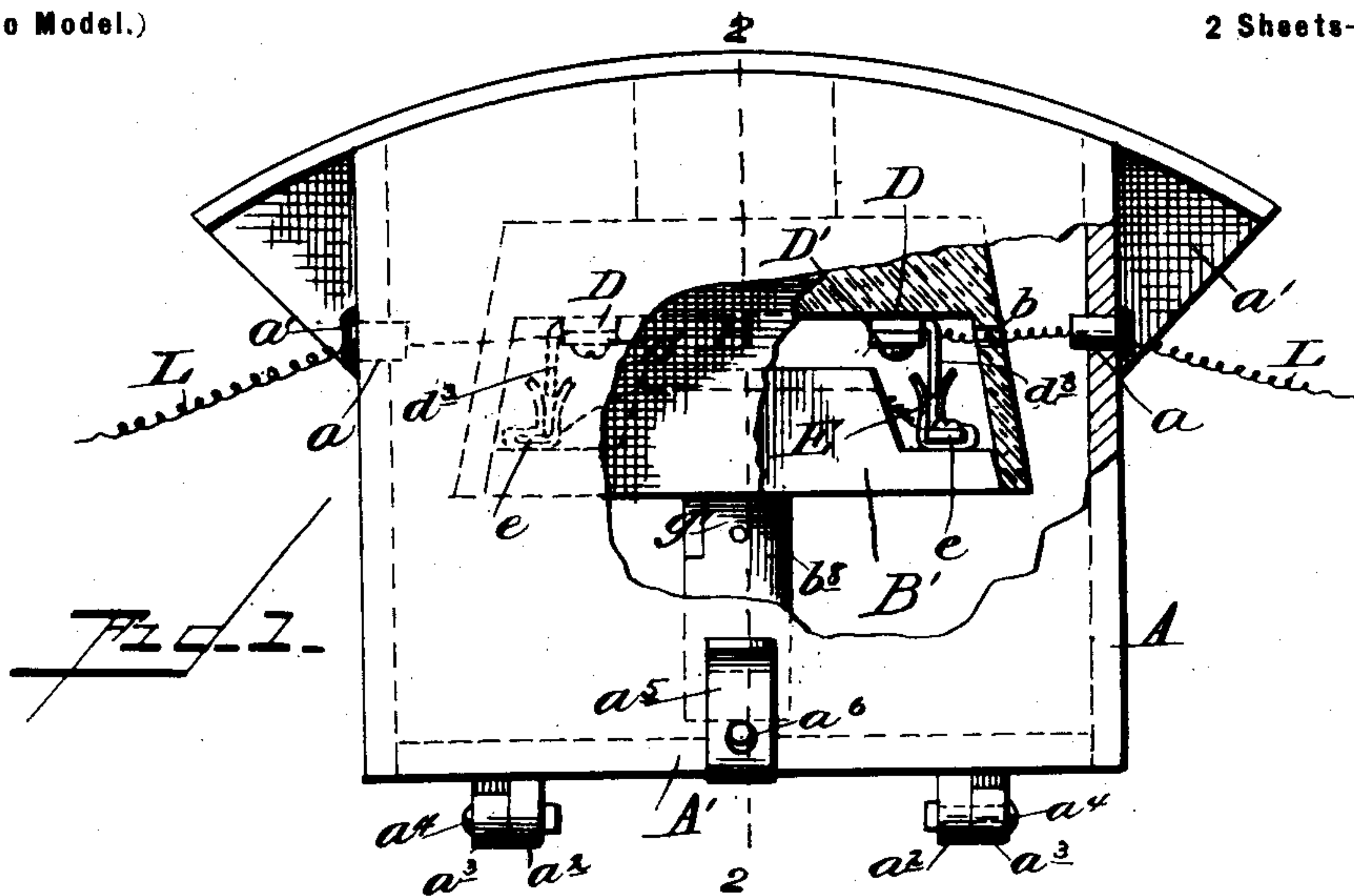


J. C. STEWART & W. HORN.
FUSE BOX.

(Application filed Apr. 28, 1902.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
Frank L. Ourand
Albert Hopkins

John C. Stewart
Walter Horn
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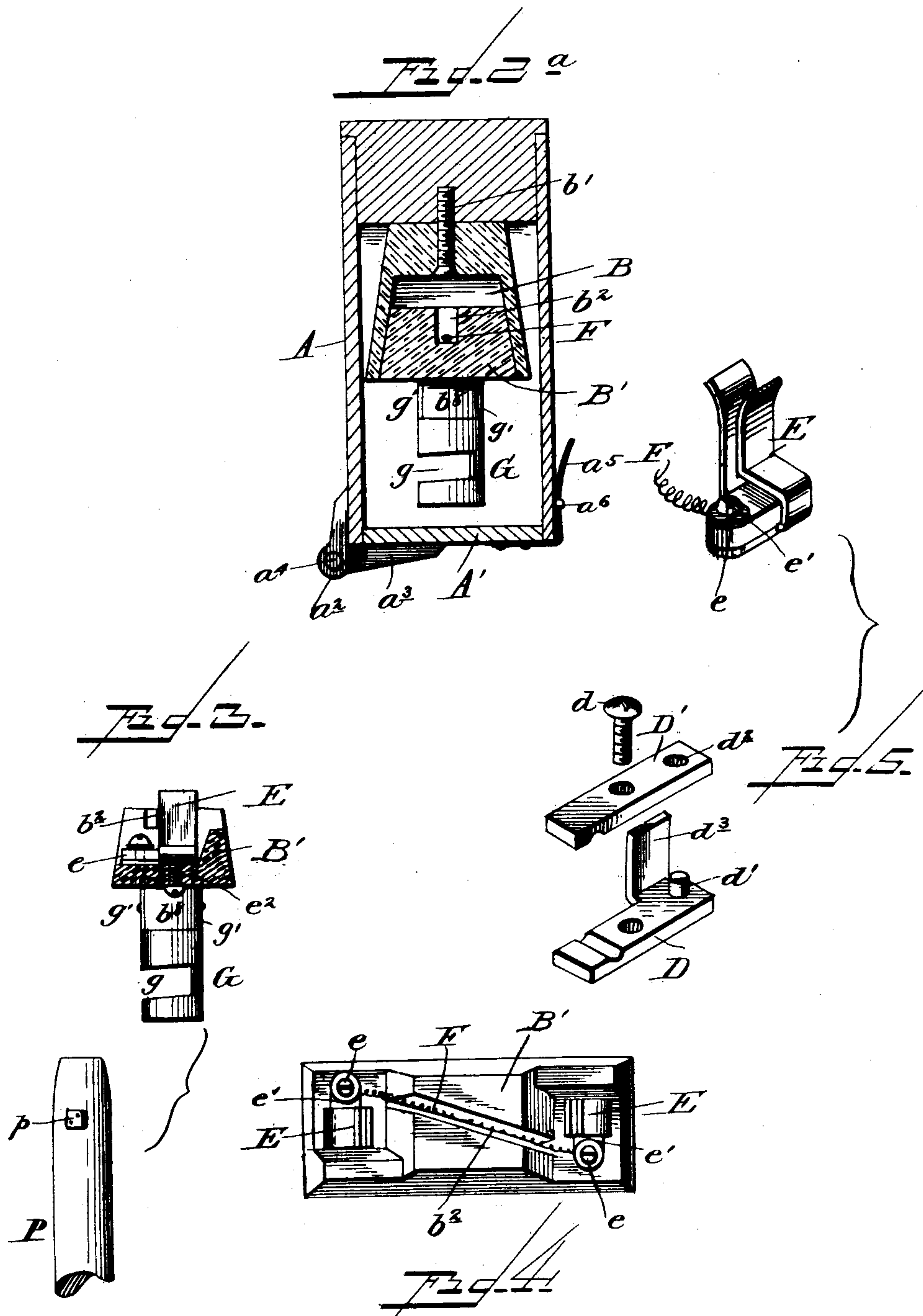
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Witnesses
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UNITED STATES PATENT OFFICE.

JOHN C. STEWART AND WALTER HORN, OF NEWARK, OHIO.

FUSE-BOX.

SPECIFICATION forming part of Letters Patent No. 711,543, dated October 21, 1902.

Application filed April 28, 1902. Serial No. 104,906. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. STEWART and WALTER HORN, citizens of the United States, and residents of Newark, Licking county, Ohio, have invented certain new and useful Improvements in Fuse-Boxes, of which the following is a specification.

Our invention relates to that class of fuse-boxes having a fusible safety-strip.

The objects of our invention are to provide a fuse-box in which the safety-strip may be readily removed and replaced from below by means of a rod or pole in the hands of the operator and to provide a box which shall be entirely waterproof. These objects we accomplish by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a front perspective of our improved fuse-box with parts broken away. Fig. 2 is a vertical longitudinal section through the same with the pole engaged with the socket on the fuse block or carrier. Fig. 2^a is a section on line 2-2, Fig. 1. Fig. 3 is a detail view of the fuse block or carrier removed and the pole disconnected. Fig. 4 is a plan of the fuse block or carrier. Fig. 5 is a detail view of the line-wire and fuse-wire terminals.

A designates the inclosing case, preferably of cast-iron and provided in its opposite end walls with apertures *a a* for the line-wires *L L* and having projecting flanges *a' a'* overhanging said apertures to prevent the entrance of water, snow, &c. The lower open end of the case *A* is provided with a downwardly-swinging door *A'*, hinged at one edge by means of ears *a² a³*, cast integral with the case and door, respectively, and connected, as usual, by pintles *a⁴*. The free edge of the door is provided with a suitable latch *a⁵*, adapted to snap over a catch *a⁶*, integral with the side of the case.

B is a hollow porcelain fuse-box open at its bottom and provided at its ends with apertures *b b* for the line-wires *L L*, and *B'* is the porcelain fuse block or carrier, of a size to enter the lower open end of the box *B*. The box *B* is secured to the top wall of the case *A* by means of a screw *b'*. The ends of the line-wires are each held between two clamping-plates *D D'*, each pair of plates being secured to the top wall of the box by a screw *d d*, passed through them, and the upper

plate *D* of each pair is provided with a projection *d'*, which enters an aperture *d²* in the lower plate *D'*, so as to hold the latter from turning on the screw *d*. The upper plate *D* of each pair is further provided with a depending terminal *d³*. The fuse-block *B'* is recessed at its ends on its upper face and provided therebetween with an oblique groove *b²* for the fusible wire or strip *F*.

E E are spring jacks or clips secured to the block *B'* in the recessed ends thereof by screws *e e*, which also pass through strips or plates *e' e'*, between which and the heads of the screws the ends of the fuse wire or strip are held. The spring-jacks *E E* are further held by screws *e² e²*, which pass up through the block *B'* into the plates *e' e'*, which overlie the bases of the spring-jacks. When the fuse-block *B'* is inserted in the fuse-box *B*, the spring-jacks *E E* will grasp the terminals *d³*, and so hold the block in place and connect the ends of the line-wires by the fusible strip.

G is a pole connection or socket secured to the lower side of fuse-block *B'* and provided with a bayonet-slot *g*. The pole-socket *G* may be secured in any desired manner, one way being by providing it with ears *g' g'* at its upper end, which embrace an integral lug or boss *b⁸* on the lower face of the fuse-block, to which they are secured by screws.

P designates the pole, of a length to reach from the operator to the overhead fuse-boxes, and so obviate the use of a ladder. This pole is adapted at its upper end to enter the socket *G* and is provided with a lateral projection *p* to enter the bayonet-slot, and so form a positive though separable connection between the pole and the fuse-block.

Should a fuse-wire burn out, the operator will take a pole *P* and with the upper end release the latch *a⁵* and allow the door *A'* to swing down, after which the operator will insert the upper end of the pole in the socket *G* and by a downward pull remove the fuse-block. There will be no danger to the operator, whose hands are not brought into proximity to the line-wires, and all danger from falls is likewise obviated. A new fuse-wire will now be inserted and the fuse-block again elevated and replaced in the fuse-box, after which the pole will be disengaged and employed to close the door *A'*. A great saving

of time will also be effected by our pole in replacing burned-out fuses over the old way of getting up to the boxes by means of ladders.

5 What we claim is—

1. The combination with a fuse-box and its removable block or plug having a pole connection, of a pole for removing the said block or plug and provided at its upper end with
10 means for separably engaging said pole connection.

2. The combination with a fuse-box, of a removable block or plug therefor provided on its under side with a pole connection or socket
15 to receive a pole end; whereby the plug or block may be readily inserted and removed to replace the fuse.

3. As an improved article of manufacture a fuse plug or block provided with a pole
20 socket or connection to receive a pole end; whereby the plug or block may be readily inserted and removed to replace the fuse.

4. The combination with the outer casing having a downwardly-swinging bottom provided with a latch releasable from below, of
25 a fuse-box within the casing and having a

downwardly-removable fuse block or plug provided with a pole connection or socket.

5. The combination with the open-bottom fuse-box having end apertures for the fuse-
30 wires, wire-clamping devices and depending terminals, of a fuse block or plug to enter the lower end of the box and having spring-jacks to engage said terminals and clamps for the
35 fuse-wire and a pole connection on the under side of the plug or block, substantially as described.

6. The combination with the fuse-box having an open lower end, line-wire clamps and depending terminals, of a plug or block hav-
40 ing spring-jacks to engage said terminals and fuse-wire clamps or binders, and a socket on the under side of the block or plug provided with a bayonet-slot.

In testimony whereof we affix our signa-
45 tures in presence of two witnesses.

JOHN C. STEWART.
WALTER HORN.

Witnesses:

W. G. TAAFEL,
C. S. WEISGERBER.